

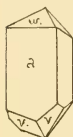
On the occasion of his promotion to the grade of Commander he was presented with his bust in white marble. The account of this manifestation of high esteem enumerates twenty-five publications relative to natural or medical sciences, and two hundred and eighty-six concerning the mineral sciences. Some of these latter related to mineralogy and paleontology, notably the description of the fossils of the secondary formations of Luxembourg in collaboration with F. Chapuis, crowned by the Academy in 1851. The greater part are concerned with the geology of Belgium, notably his notes on the Lias, in which he solved the question of the Sandstone of Luxembourg and of Hettange; those on the anthracitic of the Condroz, in which he assigned, after others, but often differently, the Devonian beds to the Eifelian or middle Devonian, and the Famennian or upper Devonian; his discussion with M. Dupont relating to the gaps which that observer admitted in the Carboniferous limestone; on the plicated appearance of the beds of the Ardennes; on the granite of Lammersdorf; on mineral waters, especially of Spa; on the pudding-stone of the Baraque-Michel: the origin of the labors which have demonstrated that the Tertiary (Oligocene) sea covered the Ardennes; on the giant pot-holes of the same region, and finally his remarkable geological map of Belgium and the neighboring provinces on a scale of $\frac{1}{300,000}$, the minuteness of which does not prevent one from realizing the immense progress accomplished since the death of Dumont, in the corrections made on the German map in certain divisions of the Devonian, and in the beds of Daleiden which are represented for the first time.

Prof. Dewalque has also published a coup d'oeil of the advance of the mineral sciences in Belgium (1870); the *Secular Report on the Works of the Academy (Mineral Sciences, 1872)*, and the *Catalogue of the Works on Mineralogy, Geology, and Paleontology, together with the Geological Maps which are found in the Principal Libraries of Belgium*, issued by the Geological Society in 1884.

Monazite in Delaware County, Pa.—MR. S. HARBERT HAMILTON stated that the occurrence of crystals of Monazite in the feldspar of the ancient rocks of eastern Pennsylvania had been reported to the Students' Mineralogical Club by Mr. J. Glading Dailey.

Monazite has been noted previously from several localities in the

crystalline rocks of the Atlantic coast, but never before from Pennsylvania. The particular locality discovered by Mr. Dailey is in the quarry just below Morgan's Station on the southeast side of Chester creek, about five miles from the city of Chester. The associate minerals are magnetite, hematite, green mica, quartz and a flesh-colored feldspar in which the crystals, about one-quarter of an inch in length, were observed. Two or three perfect crystals were found and a quantity of fragments. Mr. Dailey has subjected his find to the following examination:



"The best crystals were examined with the aid of a polariscope, and what appeared to be parallel extinction was observed, thus excluding the possibility of its being distorted garnet, which had been suggested, and it apparently confined the crystallization to practically tetragonal or orthorhombic; but upon looking up Monazite, which had been suggested, the angles of extinction were found to very nearly approach right angles; thus the apparent parallel extinction of a monoclinic mineral was explained. Measurements (rough, to be sure, for the surfaces did not permit the reflection of a well-defined image) were made with the reflecting goniometer of two angles, one of which was an essential angle. For angle $a w$, which according to Dana is $39^{\circ} 12' 30''$, was found 39° and about $19'$, and angle $v v$, which should be $73^{\circ} 19' 00''$, was found about $73^{\circ} 30'$.

A qualitative chemical analysis was thought necessary to insure and corroborate the above. The pulverized fragments were taken to dryness with hydrochloric acid, taken up with water and precipitated with oxalic acid. This precipitate gave upon ignition the peculiar red color of the cerium group. Another portion of powder upon fusion with white flux and solution in nitric acid gave with ammonium molybdate the characteristic reaction for phosphorus.

AUGUST 8.

MR. BENJAMIN SMITH LYMAN in the Chair.

Six persons present.

AUGUST 22.

MR. BENJAMIN SMITH LYMAN in the Chair.

Six persons present.

A paper entitled "New Species and Varieties of Mollusks from